UKH 95 - High-current terminal block

3010013

https://www.phoenixcontact.com/au/products/3010013

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High-current terminal block, nom. voltage: 1000 V, nominal current: 232 A, number of connections: 2, connection method: Screw connection, Rated cross section: 95 mm^2, cross section: 25 mm^2 - 95 mm^2, mounting type: NS 35/15, NS 32, color: gray

Your advantages

- Reliable cable connection is ensured by three-point centering of the conductor in the prismatic sleeve base
- Low contact resistance of the contact surface due to ribbing
- Screw locking by means of spring-loaded elements in the clamping part

Commercial data

Item number	3010013
Packing unit	3 pc
Minimum order quantity	3 pc
Sales key	BE1311
Product key	BE1311
Catalog page	Page 195 (C-1-2019)
GTIN	4017918091835
Weight per piece (including packing)	228.5 g
Weight per piece (excluding packing)	204 g
Customs tariff number	85369010
Country of origin	CN

Technical data

Notes

General	Screws with hexagonal socket

General

Note	For a reliable contact of multi stranded conductors it is recommended to untwist multi stranded conductors.

Product properties

Product type	High current terminal block
Number of connections	2
Number of rows	1
Potentials	1

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Electrical properties

Rated surge voltage	8 kV
Maximum power dissipation for nominal condition	7.54 W

Connection data

Number of connections per level	2
Nominal cross section	95 mm²

Level 1 above 1 below 1

Screw thread	M8
Note	Screws with hexagonal socket
Tightening torque	15 ... 20 Nm
Stripping length	33 mm
Connection in acc. with standard	IEC 60947-7-1
Conductor cross section rigid	25 mm² ... 95 mm²
Cross section AWG	2 ... 3/0 (converted acc. to IEC)
Conductor cross section flexible	35 mm² ... 95 mm²
Conductor cross section, flexible [AWG]	1/0 ... 3/0 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	35 mm² ... 95 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	35 mm² ... 95 mm²
Cross-section with insertion bridge, rigid	95 mm²
Cross-section with insertion bridge, flexible	70 mm²
2 conductors with same cross section, solid	25 mm² ... 35 mm²
2 conductors with same cross section, flexible	25 mm² ... 35 mm²
2 conductors with same cross section, flexible, with ferrule without plastic sleeve	16 mm² ... 35 mm²

Nominal current	232 A
Maximum load current	232 A
Nominal voltage	1000 V
Note	Note: Product releases, connection cross sections and notes on connecting aluminum cables can be found in the download area.
Nominal cross section	95 mm²

Ex data

Rated data (ATEX/IECEx)

Identification	Ⓔx II 2 GD Ex eb IIC Gb
Operating temperature range	-60 °C ... 110 °C
Ex-certified accessories	1201934 VDE-ISS 6
	1201659 E/AL-NS 32
	1201662 E/AL-NS 35
List of bridges	Insertion bridge / EB 2-25/UKH / 0201362
	Insertion bridge / EB 3-25/UKH / 0201375
Bridge data	177 A (95 mm²)
Ex temperature increase	40 K (238.1 A / 95 mm²)
at bridging with insertion bridge	690 V
Rated insulation voltage	800 V
output	(Permanent)

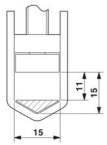
Ex level General

Rated voltage	880 V
Rated current	216 A
Maximum load current	216 A
Contact resistance	0.06 mΩ

Ex connection data General

Torque range	15 Nm ... 20 Nm
Nominal cross section	95 mm²
Rated cross section AWG	3/0
Connection capacity rigid	25 mm² ... 95 mm²
Connection capacity AWG	4 ... 3/0
Connection capacity flexible	35 mm² ... 95 mm²
Connection capacity AWG	2 ... 3/0
2 conductors with same cross section, solid	25 mm² ... 35 mm²
2 conductors with the same cross-section AWG rigid	4 ... 2
2 conductors with same cross section, stranded	25 mm² ... 35 mm²
2 conductors with the same cross-section AWG flexible	4 ... 2

Dimensions

Dimensional drawing	
Width	25 mm
Height	83 mm
Depth	90 mm
Depth on NS 32	95 mm
Depth on NS 35/7,5	90 mm
Depth on NS 35/15	90 mm

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °C
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3
Surface flammability NFPA 130 (ASTM E 162)	passed
Specific optical density of smoke NFPA 130 (ASTM E 662)	passed
Smoke gas toxicity NFPA 130 (SMP 800C)	passed

Electrical tests

Surge voltage test

Result	Test passed

Temperature-rise test

Requirement temperature-rise test	Increase in temperature ≤ 45 K
Result	Test passed
Short-time withstand current 95 mm²	11.4 kA
Result	Test passed

Power-frequency withstand voltage

Test voltage setpoint	2.2 kV
Result	Test passed

Mechanical properties

General

Terminal block mounting	15 Nm ... 20 Nm

Mechanical data

Open side panel	No

Mechanical tests

Mechanical strength

Result	Test passed

Attachment on the carrier

DIN rail/fixing support	NS 32/NS 35
Result	Test passed

Test for conductor damage and slackening

Rotation speed	10 (+/- 2) rpm
Revolutions	135
Conductor cross section/weight	25 mm² / 4.5 kg
	35 mm² / 6.8 kg
	95 mm²/14 kg
Result	Test passed

Environmental and real-life conditions

Needle-flame test

Time of exposure	30 s
Result	Test passed

Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2022-06
Spectrum	Long life test category 2, bogie-mounted
Frequency	f_1 = 5 Hz to f_2 = 250 Hz
ASD level	6.12 (m/s²)²/Hz
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

Shocks

Specification	DIN EN 50155 (VDE 0115-200):2022-06
Pulse shape	Half-sine
Acceleration	5g
Shock duration	30 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

Ambient conditions

Ambient temperature (operation)	-60 °C ... 110 °C (Operating temperature range incl. self-heating;

	for max. short-term operating temperature, see RTI Elec.)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (operation)	20 % ... 90 %
Permissible humidity (storage/transport)	30 % ... 70 %

Standards and regulations

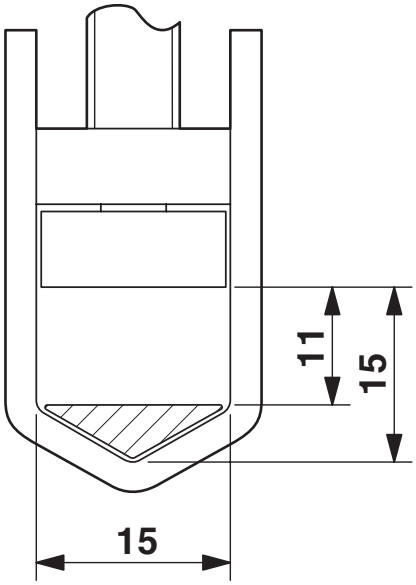
Connection in acc. with standard	IEC 60947-7-1

Mounting

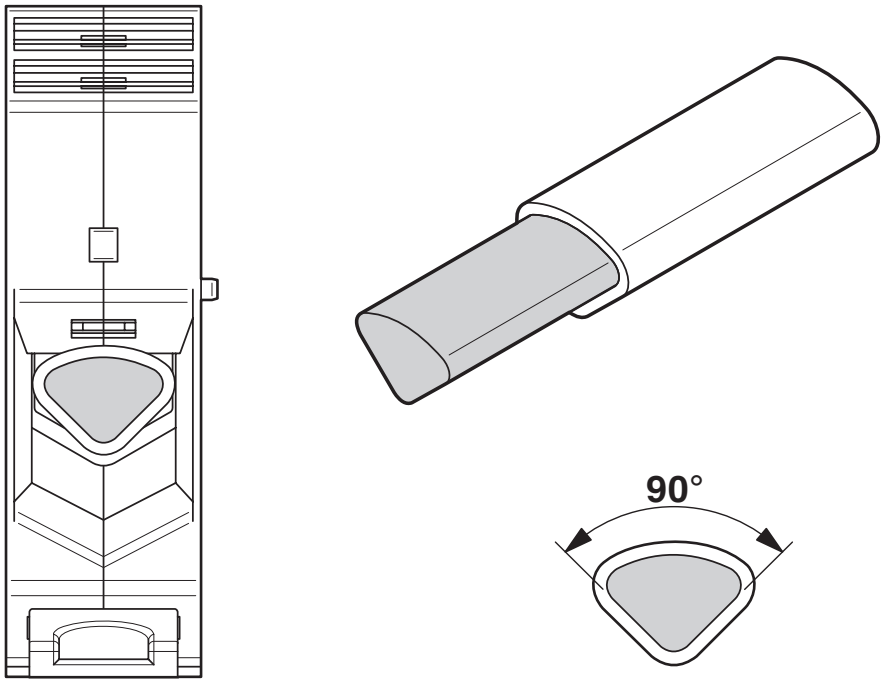
Mounting type	NS 35/15
	NS 32
Terminal block mounting	15 Nm ... 20 Nm

Drawings

Dimensional drawing



Schematic diagram



Connecting aluminum cables. Further notes can be found in the download area

Circuit diagram

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/au/products/3010013

CSA
Approval ID: 13631

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	600 V	200 A	2 - 4/0	-
Use group C				
	600 V	200 A	2 - 4/0	-

cULus Recognized
Approval ID: E60425

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
Use group B				
	600 V	230 A	2 - 4/0	-
Multi-conductor connection	600 V	230 A	4 - 2	-
Use group C				
	600 V	230 A	2 - 4/0	-
Multi-conductor connection	600 V	230 A	4 - 2	-

KEMA-KEUR
Approval ID: 71-116392

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	1000 V	-	-	- 95

LR
Approval ID: LR2041789TA-02

DNV
Approval ID: TAE00001CT

ATEX
Approval ID: KEMA98ATEX1786U

EAC Ex
Approval ID: KZ 7500525010101950

IECEx
Approval ID: IECEx KEM 06.0029U

CCC
Approval ID: 2020322313000623

UKCA-EX
Approval ID: DEKRA 21UKEX0307U

UL Comp Hazloc CA US
Approval ID: UL US CA L 192998

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	600 V	230 A	2 - 4/0	-

Classifications

ECLASS

ECLASS-13.0	27250101

ETIM

ETIM 9.0	EC000897

UNSPSC

UNSPSC 21.0	39121400

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%

EF3.0 Climate Change

CO2e kg	1.347 kg CO2e

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